

APPLICATION NO.

10/632,063

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

07/31/2003 Ella S. Field F42.12-0002 2042

04/22/2005 EXAMINER

7590 04/22/ Brian D. Kaul Westman, Champlin & Kelly Suite 1600 900 Second Avenue South Minneapolis, MN 55402-3319

JIANG, CHEN WEN

ART UNIT PAPER NUMBER

3744

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		(/)
Office Action Summary	Application No.	Applicant(s)
	10/632,063	FIELD ET AL.
	Examiner	Art Unit
	Chen-Wen Jiang	3744
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 16 March 2005.		
	This action is FINAL. 2b) This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
 4) Claim(s) 1-5,8-17,19,21,23,24,27,32,35,38-47 and 49-52 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-5,8-17,19,21,23,24,27,32,35,38-47 and 49-52 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 		
Application Papers		
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 31 July 2003 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1,2,8,9,13,21,35,38,39,40,45,47 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hergatt et al. (U.S. Patent Number 3,777,506) in view of Malik (WO 90/14563) and further in view of Hunter (U.S. Patent Number 2,297,150).

Hergatt et al. disclose a portable air conditioner apparatus for campgrounds or trailer parks. Referring to Figs. 1-3, the portable air conditioner apparatus of the present invention is generally indicated at 1 and includes a conventional air refrigerating system (not shown) enclosed in a housing 2 which in turn is mounted upon a pair of front wheels 3. The back panel 4 of frame 2 is provided with a horizontally extending bar 5 supported by suitable brackets 6 attached to the back panel by which the back of the unit may be lifted from a supported position for easy movement on the front wheels 3. Flexible hoses or tubes 47 and 52 are connected between the mounting stubs 40 and 41 and the discharge and return ports 45 and 46, respectively, of the air conditioner unit. Both of such hoses may be made of flexible plastic material reinforced by fiberglass impregnation and spiral wires. The cool air discharge hose 47 consists

Application/Control Number: 10/632,063

Art Unit: 3744

of two flexible tubes 49 and 50, as best shown in FIG. 3. The inside tube 49 is of the same diameter as inner member 42 of mounting stub 40 and is concentrically positioned within outer hose 50 by peripherally located spacer elements 51, the trapped air between such hoses acting to insulate the cool air flow through inside tube 49 from atmospheric conditions. Vents are seen from Figs. 6 and 7. These air conditioner units are readily adaptable or practical for campgrounds, trailer parks. Malik discloses the cooling/heating system has controller and may be controlled by a control device which is portable and includes a temperature sensor and temperature setting. However, Hergatt et al. and Malik do not disclose using on fabric tent. Hunter discloses an air-conditioning unit in the same field of endeavor for the purpose of cooling fabric tent. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Hergatt et al. and Malik using on fabric tent in view of Hunter so as to cool the tent inside.

Page 3

4. Claims 1,2,5,8,9,10,16,17,19,35,38,39,40,45,47,49,50 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whiteman (U.S. Patent Number 4,632,019) in view of Weber (U.S. Patent Number 5,839,654) and further in view of Hunter (U.S. Patent Number 2,297,150).

Whiteman discloses a portable air-conditioner. Referring to Figs. 1 and 2, The unit 10 is designed to be portable and moved around on the wheels 12,13,14, and a tow bar 16 pivots from the rear end 18 for ease of transporting the system. They include a diesel or gasoline powered engine that powers an air-conditioner. Gages 28 may be provided for monitoring aspects of the operation of the ventilator. Ducts 32,34 must have some freedom of movement for fitting. A blower ventilates the heat exchanger and forces air over the cooling coils. Multiple

Art Unit: 3744

compartments and vents have been shown in Fgis. 1 and 2. A rigid support handle 60 is located at opposite end the wheels. A flexible hose extended between the air-conditioning units and a fitting on the airplane for ventilating and cooling the interior of the airplane disclosed in the prior art. Various shelters may be used as warehouses, construction offices or the like. Weber discloses the air-conditioning system has controller and may be controlled by a portable control device with thermostat. However, Whiteman and Weber do not disclose using on fabric tent. Hunter discloses an air-conditioning unit in the same field of endeavor for the purpose of cooling fabric tent. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Whiteman and Weber using on fabric tent in view of Hunter so as to cool the tent inside.

5. Claims 1,2,5,8,9,10,12,16,17,19,21,32,35,38,39,40,45,46,47,49,50,51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strauss et al. (U.S. Patent Number 3,964,458) in view of Brimer et al. (U.S. Patent Number 4,784,212) and further in view of Saito (JP59180224).

Strauss et al. disclose a self-contained wheeled power unit for conditioning space. The equipment used includes a collapsible conduit and means for sucks air from the outside of the unit into conduit and blowing the same into the space. There are storage compartments 48, 60 and 62. A relatively comprehensive instrument and control panel 88 is mounted inside of the housing 13. All apparatus was controlled from the panel 88 or remotely which had meters for the electrical outlets, pressure and temperature gauges, switches and controls for the components, circuit breakers, etc. A towing yoke 40 made of robust rectangular steel members is welded to the front framing member 16 and any conventional towing hitch apparatus 42 may be mounted at

Application/Control Number: 10/632,063

Art Unit: 3744

Page 5

the forward end thereof, preferably including a vertically adjustable standard 44 to enable the vehicle 10 to be supported independently. The equipment includes a generator driven by the prime mover to provide electrical power. Brimer et al. disclose the air-conditioning system has controller and may be controlled remotely with thermostat. The control unit 10 is mounted on the interior wall 26 and includes an internal temperature sensor 14. An external, remote temperature sensor can be substituted for the internal sensor 14 when it is desired to locate the control unit 10 outside the space. The control device and the temperature sensor are connected to the air conditioning unit as shown in Figs. 1 and 2. However, Strauss et al. and Brimer et al. do not disclose using on tent. Saito discloses an air-conditioning unit with wire control in the same field of endeavor for the purpose of cooling tent. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Strauss et al. and Brimer et al. using on fabric tent in view of Saito so as to cool the tent inside.

6. Claims 1-4,8-10,16,17,19,21,27,35,38,39,40,45,46,49,50,51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nathan (U.S. Patent Number 4,450,900) in view of Brimer et al. (U.S. Patent Number 4,784,212) and further in view of Saito (JP59180224).

Nathan discloses a mobile air conditioning unit. Referring to Figs. 1 and 2, the mobile unit 10 has a platform 11 mounted on a pair of wheels 12. The wheels 12 are located off the center of the platform. These devices are installed in line from an air entry 20 as shown in FIG. 3. First a pre-filter 21 removes any large particles entering the conditioner, then chemical absorbent filters 22 remove odors and toxic gases. These filters 22 are disposable and may be replaced at regular intervals depending upon operation of the unit. In another embodiment, the chemical absorbent filters 22 may be replaced by electrostatic filters to remove all airborne particles in the air. The

Art Unit: 3744

air then passes through an air cooler 25 having coils cooled by a compressor 26 located further on in the system. A first flexible conduit 50 is provided for connection to the air inlet 20 of the unit 10. A suitable quick connect coupling 51 is employed to connect the conduit 50 to inlet 20. A second flexible conduit 52 is provided for connection to the air outlet 41 of the unit 10. The electrical power to the unit can be externally supplied. Alternatively, an electrical powergenerating source, such as a gasoline or diesel generator, can be mounted directly on the open platform. The operation of the unit is controlled from operating controls (not shown) where variable controls enable temperature and humidity to be selected. The controls include mechanical and electrical devices preferably solid state, to maintain temperature and humidity at preset levels. Monitoring devices such as temperature and humidity recorders may also be provided. Some examples of enclosed spaces requiring controlled atmospheres include aircraft, transport trailers, radar stations and mining tunnels. Brimer et al. disclose the air-conditioning system has controller and may be controlled remotely with thermostat. The control unit 10 is mounted on the interior wall 26 and includes an internal temperature sensor 14. An external, remote temperature sensor can be substituted for the internal sensor 14 when it is desired to locate the control unit 10 outside the space. However, Nathan and Brimer et al. do not disclose using on tent. Saito discloses an air-conditioning unit with wire control in the same field of endeavor for the purpose of cooling tent. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Nathan and Brimer et al. using on fabric tent in view of Saito so as to cool the tent inside.

7. Claims 14,15,23,24,43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over paragraphs 2-5 of this Office Action.

Art Unit: 3744

In regarding to claims 14,15,23,24,43 and 44, it is noted that applicant recites the hose connection method. Upon a close review of applicant's specification, it appears that the claimed method does not have any criticality and/or lead to any new and unexpected results. Applicant does not specify the deficiencies of other parameters used in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art to have selected the claimed method for the connection since these methods that are no better or provided improved performance over that which is commonplace in the prior art. Also, sleeve member and drawstring are well known to make hose connection in the prior art.

8. Claims 11 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over rejected claims 1,38,39 and in view of Hjelle (U.S. Patent Number 5,005,679) or Mills et al. (U.S. Patent Number 6,629,430).

Hjelle and Mills et al. disclose fabric in the same field of endeavor for the purpose of making cooling chamber. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of above rejected claims 1,38 and 39 with a fabric siding in view of Hjelle and Mills et al. to make the cooling chamber.

9. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over rejected claims 38,39 and in view of Grandinetti (U.S. Patent Number 2,620,638).

Grandinetti discloses retractable handle (71) in the same field of endeavor for the purpose of handling. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of rejected claims 38 and 39 with a retractable handle in view of Grandinetti to move the cooling unit.

Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Tuesday-Friday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (571) 272-4808. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/632,063

Art Unit: 3744

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang
Primary Examiner

E-6)6